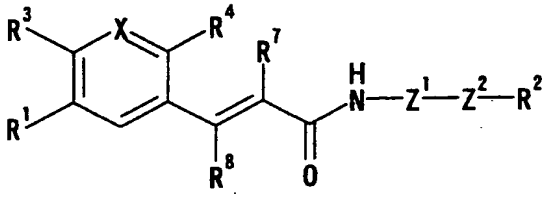
ABSTRACT

A compound represented by the formula:



wherein $R^1$ is a 5- or 6-membered ring; $R^3$ is a hydrogen atom, a lower alkyl group or a lower alkoxy group; $R^7$ and $R^8$ are each a hydrogen atom or a lower alkyl group; $Z^1$ is another 5- or 6-membered aromatic ring; $Z^2$ is a group represented by $-Z^{2a}-W^1-Z^{2b}-$ [wherein $Z^{2a}$ and $Z^{2b}$ are each O, $S(O)_m$ (wherein m is 0, 1 or 2), an imino group or a bond, and $W^1$ is an alkylene chain]; X is CR (wherein R is a hydrogen atom, a lower alkyl group, a lower alkoxy group, an acyl group, or R and adjacent $R^4$ may form a 5- or 6-membered alicyclic heterocyclic group) or N; $R^4$ is $NR^5R^6$ (wherein $R^5$ and $R^6$ are each a hydrogen atom, a hydrocarbon group, a heterocyclic group or an acyl group), or $R^5$ and $R^6$ are bonded to each other to form a heterocyclic group of $NR^5R^6$; and $R^2$ is (1) an amino group which may be a quaternary ammonium or oxide, (2) a nitrogen-containing heterocyclic group which may contain a sulfur atom or an oxygen atom as the ring-constituting atom, in which the nitrogen atom may be converted to a quaternary ammonium or an oxide, or the like;

or a salt thereof.

The compound has excellent CCR5 antagonistic activity and thus is useful as a prophylactic and/or therapeutic medicine for HIV infection into human peripheral blood monocyte, especially for AIDS.